THE TOWN OF VIENNA
2013 WATER QUALITY REPORT
for the Town of Vienna
and the surrounding service area

MESSAGE FROM THE TOWN MANAGER

This is the Town of Vienna's fifteenth annual report to inform you about your drinking water quality. As a part of the Safe Drinking Water Act of 1996, the U.S. Environmental Protection Agency (EPA) requires all water utilities across the nation to mail their customers a Water Quality Report by July 1 every year. Our goal is to provide you with a safe and dependable supply of drinking water and we want you to understand our efforts to protect your water supply.

The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health and the US Environmental Protection Agency (EPA). We constantly monitor the water supply for various contaminants to ensure we meet all regulatory requirements. The tables in this report list only those contaminants that had some level of detection. Many other contaminants have been analyzed but were either not present or were below the detection limits of the laboratory equipment. Most of our water quality data is from testing done in 2012; however, the Commonwealth allows us to monitor for some contaminants less than once a year because the concentration of these contaminants does not change frequently. Even though some of our data may be more than one year old, it is accurate.

On page two of this report, we have provided detailed information regarding an omission in our sampling requirements in 2012, during which time we did not collect and analyze water samples for lead and copper. In order to rectify this omission, we collected and tested 30 samples between February 19 and 22, 2013 and provided the samples to the Virginia Department of Health. The results indicated that the samples were below the established action levels and we are now in compliance. In addition, we will continue to monitor for lead and copper throughout this year.

Is your water safe to drink? Absolutely! We're proud to share our water quality test results with you. For further information, please call the contact number below.

Sincerely,

Mercury Payton
Town Manager

This report contains important information about your drinking water. For more information or assistance with understanding the important information contained within this document, contact Donald Kahn, Town of Vienna Water and Sewer Superintendent by phone at (703) 319-8610 or by e-mail at dkahn@viennava.gov.

El informe contiene informatión importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

OPPORTUNITIES FOR PUBLIC PARTICIPATION

Decisions concerning Vienna's water are made by the Town Council. Regular meetings are normally held the first and third Mondays of the month (except July and August) at 8 p.m. in the Council Chamber at Town Hall.

GENERAL INFORMATION

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Substances (referred to as contaminants) in source water may come from septic systems, discharges from domestic or industrial wastewater treatment facilities, agricultural and farming activities, urban storm water runoff, residential uses and many other types of activities. Water from surface sources is treated to make it drinkable. All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water possesses a health risk. More information can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

NOTICE TO CUSTOMERS

In keeping with National Primary Drinking Water Regulations, we are informing you that we may be in violation of state regulations. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Vienna is required to test for lead and copper every three years and during 2012 we did not monitor or test or did not complete all monitoring or testing for lead and copper and therefore cannot be sure of the quality of our drinking water during that time. **There is nothing you need to do at this time.**

We are attempting to prevent further violations by ensuring that all required sampling in our distribution system is done in accordance with the state drinking water regulations. Further violations will be reported as required by state regulations in order to increase consumers' awareness of conditions that exist in their public water system.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, please contact Vienna Water and Sewer Superintendent Donald Kahn at (703) 319-8610 or dkahn@viennava.gov.

WATER SOURCES

For the calendar year 2012, the Town of Vienna was supplied with treated surface water from the Potomac River by the Fairfax County Water Authority (FCWA) and the City of Falls Church. The Town purchases treated water from the Washington Aqueduct supplied by Falls Church.

HOW DO I READ THIS CHART?

Our water is tested to assure that it is safe and healthy. Contaminants in the drinking water are routinely monitored according to Federal and State regulations. The table contained in this report shows the most recent results of our monitoring. Typical sources of contamination show where this substance usually originates. The following definitions are provided to help you better understand terms and abbreviations.

- The Washington Aqueduct sampling program includes cryptosporidium. Their results and information are included.
- Non-detects (ND) – laboratory analysis indicates that the contaminant is not present.
- Parts per million (ppm) – one part per million corresponds to one minute in two years or a single penny in $10,000.
- Parts per billion (ppb) – one part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.
- Parts per trillion (ppt) – one part per trillion corresponds to one minute in 2,000,000 years or a single penny in $10,000,000,000.
- Picocuries per liter (pCi/L) – picocuries per liter is a measure of the radioactivity in water.
- Nephelometric Turbidity Unit (NTU) – nephelometric turbidity unit is a measure of the clarity, or cloudiness, of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.
- Action Level (AL) – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Treatment Technique (TT) – a required process intended to reduce the level of a contaminant in drinking water.
- Maximum Contaminant Level (MCL) – the highest level of a contaminant that is allowed in drinking water. MCLs are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards EPA assumes that the average adult drinks two liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-one million chance of having the described health effect for other contaminants.
- Maximum Contaminant Level Goal (MCLG) – the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Residual Disinfectant Level (MRDL) – the maximum level of total chlorine allowable by regulation.

WATER QUALITY RESULTS

I. **Microbiological Contaminants** – Were there any detections? (X) Yes, as described below. ( ) No.
Laboratory results indicated that coliform bacteria were present in one test out of 360 samples.

II. **Lead and Copper Contaminants** – Were there any detections? (X) Yes, as described below. ( ) No.

Contaminant	Units of Measurement	Action Levels	MCLG	Results of Samples for the 90th Percentile Value	Action Level Exceedence?	Sampling Year	# of Sampling Sites Exceeding Action Level	Typical Source of Contamination
Lead	ppm	0.015	0	0.001	NO	2009	0	Corrosion of household plumbing systems
Copper	ppm	1.3	1.3	0.10	NO	2009	0	Corrosion of household plumbing systems

III. **Turbidity** – Were there any detections? (X) Yes, as described below. ( ) No.

Contaminant	Treatment Technique Limits	Level Detected	Violation?	Sampling Year	Typical Source of Contamination
Turbidity*	1.1 NTU Maximum 2. 0.3 - 95% of the time	0.25 =highest single hourly measurement. Lowest monthly percentage of samples meeting turbidity requirements =100%.	NO	2012	Soil runoff

Notes: *The turbidity level of filtered water shall be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month and shall at no time exceed 1 NTU.

IV. **2012 Finished Water Characteristics, Source Monitoring for Regulated Parameters** –
Were there any detections? (X) Yes, as described below. ( ) No.

Inorganic/ Synthetic/ and Metals	Units of Measurement	MCLG	MCL	Level Detected	Violation?	Range of Detection at Sampling Points	Sampling Year	Typical Source of Contamination
Arsenic	ppb	0	10	0.6	NO	ND - 0.6	2012	Erosion of natural deposits; runoff from orchards/manufacturing of glass and electrical products
Atrazine	ppb	3	3	0.1	NO	ND - 0.1	2012	Runoff from herbicide used on row crops.
Barium	ppm	2	2	0.046	NO	0.025-0.046	2012	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	ppm	100	100	2	NO	ND - 2	2012	Erosion of natural deposits; discharge from steel and pulp mills
Combined Radium 226/228**	pCi/L	0	5	1.2	NO	ND - 1.2	2011	Erosion of natural deposits
Fluoride	ppm	4	4	0.9	NO	0.5-0.9	2012	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (Nitrogen)	ppm	10	10	3	NO	0.3-3	2012	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (Nitrogen)	ppm	1	1	0.02	NO	ND - 0.02	2012	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	ppb	50	50	1	NO	ND - 1	2012	Erosion of natural deposits; discharge from petroleum refineries; discharge from mines
Simazine	ppb	4	4	0.05	NO	ND - 0.05	2012	Herbicide runoff
Total Organic Carbon	% removal	N/A	TT (0% - 45% required)	30% - 38%	NO	17% - 58%	2012	Naturally present in environment

Notes:
**Most recent monitoring for this parameter was 2011.

Contaminant/ DBPs/ Disinfection By-products	Annual MCLG (ppb)	Average MCL (ppb)	System Running Annual Average (ppb)	System Range (ppb)	Violation?	Sampling Year	Typical Source of Contamination
TTHMs (Total Trihalomethanes)	N/A	80	44.77	6 - 74	NO	2012	Byproduct of chlorination
Haloacetic Acids (5)	N/A	60	31.32	2.75 - 57.0	NO	2012	Byproduct of chlorination
Total Chlorine	4 ppm	4 ppm	2.50 ppm	1.1 - 2.7	NO	2012	Disinfection additive

PERCHLORATE RESEARCH

Perchlorate is a naturally occurring as well as man-made compound. Its presence in drinking water is currently unregulated and utilities are not required to monitor for it. The Washington Aqueduct has been voluntarily monitoring for perchlorate since 2002. The EPA initially established a reference dose of 24.5 parts per billion (ppb) for perchlorate and beginning in 2009 has proposed an interim health advisory of 15 ppb. A reference dose is a scientific estimate of a daily exposure level that is not expected to cause adverse health effects in humans. The reference dose concentration was used in EPA's efforts to address perchlorate in drinking water and to establish the interim health advisory. In 2011, finished water sample results for perchlorate collected by Washington Aqueduct at both treatment plants ranged between none detected and 3.7 ppb. If you have special health concerns, you may want to get additional information from the EPA at www.epa.gov/safewater/contaminants/unregulated/perchlorate.html or contact the EPA's Safe Drinking Water Hotline at 1-800-426-4791, TTY711.

LEAD IN DRINKING WATER

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Vienna is responsible for providing high quality drinking water, but cannot control the variety of materials used in private plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead or by calling the Safe Drinking Water Hotline at 1-800-426-4791, TTY 711.

TURBIDITY IN DRINKING WATER

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

2012 SOURCE WATER CRYPTOSPORIDIUM INFORMATION

Cryptosporidium was monitored in the source water monthly in 2012 but was not detected in any sample. The only detection of Cryptosporidium that has occurred since the initiation of source water monitoring was in October 2005.

2012 SOURCE WATER GIARDIA INFORMATION

Giardia was monitored in the source water monthly in 2012. One Giardia cyst was detected in one sample resulting in a single detected concentration of 0.19 cysts/L for February 2012.